DAQ Status

John Haggerty
Brookhaven National Laboratory

New For Run 5

- MUTR Multievent Buffering Works, as far as we know; major rewrite of FPGA
- EMCAL Multievent Buffering Might work; pretty much complete rewrite of all three FPGA's
- JSEB firmware updated to eliminate padding banks; seems to work…
- Smart Trigger Pre-Processors added to 6 MUTR DCM crates
- Six Buffer Boxes
- Programmable Pulse Generator replaced by Mode Bit Driver
- Split Level 1 data into GL1+LL1
- New granule hardware: AGEL; TOF.W?
- Computers all upgraded to Scientific Linux 3.0.2
- Event Builder now based on Linux

It's a ton of new stuff, which will all be covered in detail in other talks today

Status and Immediate Future

- David, Ed, and Brian got to the point last week of running a single granule and GL1 through the Event Builder!
- Logging data wasn't yet possible; work on debugging that is underway and hopefully we'll be able to write some sample data and test it this week
- We may take a side trip through splitting the GL1 and LL1 data at that point to get it done and debug it in a simple environment
- Then start adding granules, starting with PC.E+PC.W

Run 5 Startup

- Note that most of the changes for this year are essentially irreversible, and we are already committed to most of them
- We're around a month behind the August plan, but things have started to come together, and the run is delayed a month
- The only real optional feature is multievent buffering, but I would recommend moving to it exclusively essentially from the very beginning—it's the only way we're going to see any problems it still has, and we then have at least the beam tune-up time to try and resolve them or adapt to them